

Notice of Allowability

Application No.

09/933,169

Examiner

Mr. Terry K. Cecil

Applicant(s)

DRUGA, LARRY A.

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 9-17-2004 and the telephonic interview of 11-19-2004.
2. ☒ The allowed claim(s) is/are 2-10, 12 and 16-21 respectively renumbered upon allowance as claims 1-16.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 11-19-2004.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

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Note: Claims 2-10, 12 and 16-21 are allowed and have been respectively renumbered upon allowance as claims 1-16.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee. Authorization for this examiner's amendment was given in a telephone interview with Leo Jennings on 11-19-2004.

2. The application has been amended as follows:

- The claims has been amended as in the attached set of claims.

Required Drawings

3. Applicant agreed to file formal drawings including the approved drawing changes filed 3-10-2003.

Reasons for Allowance

4. The following is an examiner's statement of reasons for allowance:

- The non-elected method claims have been canceled.
- The closest cited art—McDuffie '347 and Humbert '800—fail to anticipate or render obvious, alone or in any proper combination, the stabilizing spring (or stabilizing and biasing

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means) that is (i) coaxial with the valve assembly (iii) disposed proximate the inlet end and (iii) located between, and in contact with, the first retainer (or forward flow bypass means) and the inlet end and configured to urge the filter media against the outlet end—in combination with all the other limitations in each of claims 2, 3 and 12.

- Claim 3 was amended to correct misspellings and problems of indefiniteness.
- The equivalent structure for the “means for allowing a fluid to flow..” of claim 3 is considered to the elements listed in claim 5 or structural equivalents thereof.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee.

Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

1. (Cancelled).
2. (Previously Presented) A fluid filter having two opposed ends comprising:
 - a housing having;
 - an inlet end having an inlet for passage of fluid into said filter; and
 - an outlet end having an outlet for passage of fluid leaving said filter;
 - a filter media assembly disposed between said inlet and said outlet, for filtering said fluid, the filter media assembly being substantially coaxial with the inlet and outlet and said filter media assembly abutting said outlet end;
 - a valve body located proximate said inlet end comprising:
 - a first retainer which houses a first spring, the first retainer engaging the first spring at one end of the first spring and a first disk disposed at another end of said first spring;
 - and
 - a second retainer located in the same inlet end as the first retainer and coaxial with said first retainer, disposed opposite to said first retainer, said second retainer having a second spring, the second retainer engaging the second spring at one end of the second spring, and a second disk disposed at another end of said second spring; and
 - a stabilizing spring coaxial with said body and each located at said inlet end between and in contact with said first retainer and said inlet end, said spring urging said filter media assembly against said outlet to stabilize said filter media assembly and said valve body;

wherein said second disk is operative to compress said second spring in a first direction toward said second retainer;

wherein said first disk is operative to compress said first spring in a second direction toward said first retainer, said first direction being opposite to said second direction;

wherein the fluid filter will function if installed so that the inlet functions as an outlet and the outlet serves as an inlet,

wherein said inlet end said outlet end and said filter media assembly are substantially coaxial.

3. (currently amended) A fluid filter having two opposed ends comprising:
a housing defining a chamber, said chamber having an inlet at an inlet end through which fluid enters said fluid, and an outlet at an outlet end through which said fluid leaves said filter;
a filter media assembly disposed in said chamber between said inlet and said outlet and abutting said outlet end, for filtering said fluid, said filter configured to filter fluid in either a forward flow direction or a reverse flow direction;

means for allowing a fluid to flow from said inlet to said outlet in a first fluid flow path, through said filter media;

valve means located proximate said inlet end and configured to control ~~flow~~; flow,
said valve means comprising (i) a forward flow bypass means for allowing said fluid to flow from said inlet to said outlet in a second fluid flow path, bypassing said filter media; and (ii) a reverse flow bypass means disposed adjacent said forward flow bypass means and in the same

end of the filter as the forward flow bypass means, and coaxial with said forward flow bypass means for allowing said fluid to flow in a third fluid flow path, bypassing said filter media, and stabilizing and biasing means coaxial with said valve means and located at said inlet end and between and in contact with said forward flow bypass means and said inlet to urge said filter media assembly against said outlet end and to stabilize said filter media assembly and valve means,

wherein the filter media, the inlet, and the outlet are substantially coaxial.

4. (Original) The fluid filter according to Claim 3, wherein said first fluid flow path includes said inlet a space between an interior face of a central wall of said chamber and said filter media, said filter media, a central passage within said chamber, and said outlet.

5. (Original) The fluid filter according to Claim 3, wherein said means for allowing said fluid to flow in said first fluid flow path comprises:

a plurality of apertures in a first retainer housing a first spring and a first disk, leading to a space disposed between an interior face of a central wall of said chamber and said filter media; and

a central passage within said chamber;

wherein said fluid passes through said apertures of said first retainer housing, said space, said filter media, and said central passage in said first fluid flow path.

6. (Previously Presented) The fluid filter according to Claim 3, wherein said reverse flow bypass means includes:

a front valve body having a first retainer housing a first spring, the first retainer engaging the first spring at one end of the first spring, and a first disk disposed at another end of said first spring; and

an end cap against which said first disk is seated, said end cap having holes in a periphery of said end cap which are sealed by said first disk;

wherein said first disk is operative to compress said first spring, moving said first disk from said end cap and opening up said holes for said fluid to pass through said front valve body to said outlet, bypassing said filter media.

7. (Previously Presented) The fluid filter according to Claim 6, wherein said forward flow bypass means includes:

a rear valve body having a second retainer housing a second spring, the second retainer engaging the second spring at one end of the second spring, and a second disk disposed at another end of said second spring;

wherein said end cap includes a central aperture, and said second disk is disposed against said end cap sealing said central aperture; and

wherein said second disk is operative to compress said second spring, to allow said fluid to pass through said central aperture, through said rear valve body to said outlet, bypassing said filter media.

8. (Previously Presented) The fluid filter according to Claim 3, wherein said second fluid flow path leads from said inlet through a front valve body and through a rear valve body toward said outlet, bypassing said filter media.

9. (Original) The filter according to Claim 8, wherein said third fluid flow path leads from said outlet through said central passage, through said front valve body, to said inlet, bypassing said rear valve body and said filter media.

10. (Original) The filter according to Claim 3, further comprising a magnet positioned around a side wall of an interior face of said chamber, which attracts and retains magnetically susceptible particles in said fluid.

11. (Cancelled)

12. (Previously Presented) A fluid filter having two opposed ends comprising:
a housing defining a chamber, said chamber having an inlet at an inlet end and an outlet at an outlet end, through which fluid passes from said inlet to said outlet, the inlet and outlet configured to be substantially coaxial;
a filter media disposed between said inlet and said outlet, which filters said fluid;
a valve assembly located proximate said inlet end, having:

a front valve body having a first retainer housing a first spring, the first retainer engaging the first spring at one end of the first spring, and a first disk disposed at another end of said first spring;

an end cap against which said first disk is seated, said end cap having holes in a periphery of said end cap which are sealed by said first disk, and said end cap having a central aperture;

a rear valve body located in the same inlet end as the front valve body and coaxial with said first valve body, having a second retainer housing a second spring, the second retainer engaging the second spring at one end of the second spring, and a second disk disposed at another end of said second spring, said second disk sealing said central aperture of said end cap; and

a stabilizing spring coaxial with said valve assembly disposed proximate said inlet end between said first retainer and said housing within said inlet end of said chamber, to hold said front valve body stably within said chamber which urges said filter media assembly against said outlet end to stabilize said filter media preferably end valve body;

wherein said first disk is operative to compress said first spring in a first direction, moving said first disk away from said end cap and opening up said holes in said periphery of said end cap, allowing fluid to pass through said holes and said front valve body to exit said filter, bypassing said filter media;

wherein said second disk is operative to compress said second spring, to allow said fluid to pass through said central aperture of said end cap from said front valve body, through said rear valve body to exit said filter, bypassing said filter media, and

wherein said inlet end, said outlet end and said filter media are substantially coaxial and the inlet and outlet have tubular hose barbs and the filter is configured to function if the filter is installed so that the inlet functions as an outlet and the outlet functions as an inlet.

13. (Canceled)

14. (Canceled)

15. (Canceled)

16. (Previously Presented) The filter according to Claim 12, wherein said end cap comprises a central aperture and a plurality of peripheral holes.

17. (Original) The filter according to Claim 16, wherein said valve body is a rear valve body, and when said disk compresses said spring, said disk moves away from said end cap, unsealing said central aperture of said end cap for passage of said fluid therethrough.

18. (Original) The filter according to Claim 16, wherein said valve body is a front valve body, and when said disk compresses said spring, said disk moves away from said end cap, unsealing said peripheral holes of said end cap for passage of said fluid therethrough.

19. (Previously Presented) The filter according to Claim 12, wherein said disk is made of plastic.

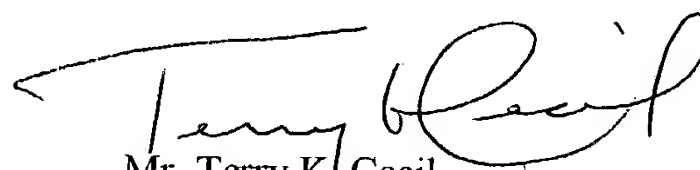
20. (Previously Presented) The filter according to Claim 12, wherein said retainer, said spring, and said end cap, are made of metal.

21. (Original) The fluid filter of claim 12, further comprising: an end cap separating said first disk from said second disk.

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5. Contact Information:

- Examiner Mr. Terry K. Cecil can be reached at (571) 272-1138 at the Carlisle campus in Alexandria, Virginia for any inquiries concerning this communication or earlier communications from the examiner. Note that the examiner is on the increased flextime schedule but can normally be found in the office during the hours of 8:30a to 4:30p, on at least four days during the week M-F.
- Wanda Walker, the examiner's supervisor, can be reached at (571) 272-1151 if attempts to reach the examiner are unsuccessful.
- The Fax number for this art unit for official faxes is 703-872-9306.
- Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mr. Terry K. Cecil
Primary Examiner
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TKC
November 19, 2004